

PROFIL ASAM AMINO DAN ASAM LEMAK SELAMA PROSES FERMENTASI TEPUNG UBI KAYU DENGAN BIAKAN ANGKAK

AMINO ACID AND FATTY ACID PROFILES DURING FERMENTATION OF CASSAVA FLOUR USING RED YEAST RICE

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ABSTRACT

This aims of this researched was to determine the protein, fat profile, amino acids and fatty acids of fermented cassava flour with red yeast rice during fermentation. Cassava flour produce through fermentation with addition 14% of red yeast rice during 0, 1, 2, 3, 4 days. The protein content was determined using Biuret method, fat content using soxhlet method with hexane solvent, amino acid profile using UPLC and fatty acid profile using GC. The highest protein, fat and amino acids found in flour were obtained on fourth day fermentation days with protein content was 26.68% and fat content was 4.70% and amino acid profile with Glycine, Alanine, Aspartic Acid, Glutamic Acid, Phenylalanine, Isoleucine, Leucine, Lysine, Methionine, Proline, Serine, Threonin, Tyrosine and Valine. Based on the result of the fatty acid profile, the longer fermentation process resulted in an increasingly saturated fatty acid (SAFA) profile profile and a decreasing profile of unsaturated fatty acids (UFA).

Keywords: Cassava, fermentation, Red yeast rice, amino acids and fatty acids.